

**TAXONOMIC NOTES ON RHYSSALINI AND RHYSIPOLINI
(HYMENOPTERA: BRACONIDAE) WITH FIRST NEARCTIC
RECORDS OF THREE GENERA**

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Abstract.—The braconid genera *Dolopsidea* Hincks, *Neurocrassus* Šnoflák and *Rhyssalus* Haliday are reported from the New World Nearctic Region for the first time. Notes are provided to facilitate identification of these genera with reference to the key to Nearctic braconid genera of Marsh et al. (1987), and with respect to other genera in their respective tribes. Figures are provided but formal species descriptions await revisions of the respective genera.

Key Words: distribution, *Dolopsidea*, *Neurocrassus*, *Rhyssalus*

In recent sorting of undetermined rogadine and hormiine Braconidae from my own collection, I have come across several closely related genera that have not previously been reported from North America, and were not included in the recent manual of Nearctic braconid genera (Marsh et al. 1987). A reclassification of the subfamilies containing these genera is now in preparation by the author; the discovery of these genera in the North American fauna is being published now to facilitate the discovery of additional material of these groups, and to update the generic keys.

***Dolopsidea* Hincks, 1944**

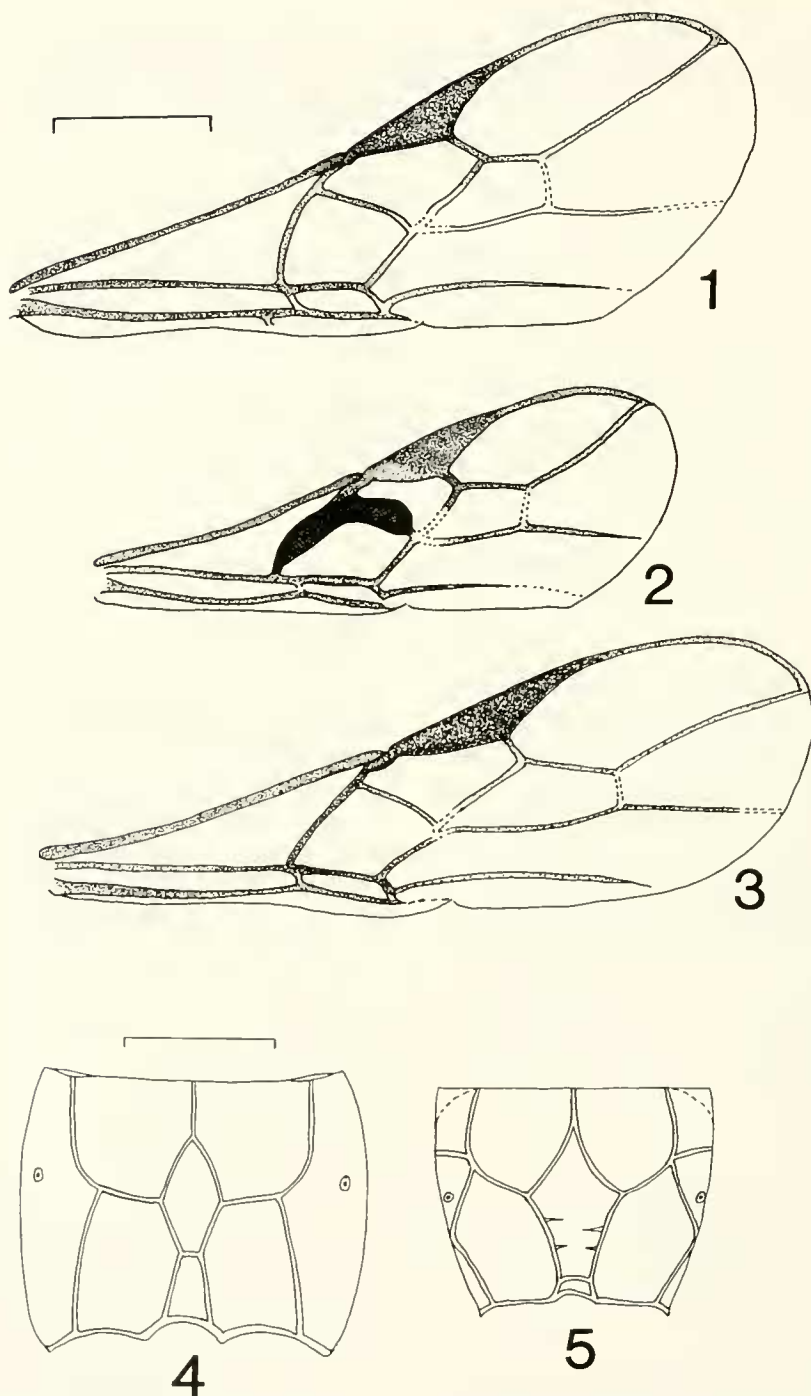
One female specimen of this genus, very similar to the Palearctic *D. indagator* (Haliday), was collected by malaise trap in the Hocking Hills, Hocking Co., Ohio, by the author, 3-9 June 1987.

The genus has often been confused, even in Britain and Europe, with *Rhyssalus* Haliday (see, e.g. Stelfox 1951) and *Oncophanes* Foerster. It will run in the key of Marsh et al. (1987) to *Oncophanes* (couplet 181) with some difficulty but differs from *Oncophanes*

in having the medial lobe of the mesoscutum sharply and strongly raised above the lateral lobes, and in the metasomal tergites 2 and 3 being enlarged and highly polished, and not sharply delineated from the epipleura by creases. In addition, the ovipositor and sheaths are usually at least as long as the metasoma. In the mesoscutal structure and metasomal sculpturing *Dolopsidea* also differs from *Rhyssalus* Haliday (see below), which, in addition to being much smaller, has a relatively unraised medial mesoscutal lobe and normal-sized and weakly sclerotized second and third metasomal tergites. All three genera have a distinctive propodeal carination pattern (Fig. 4), and have the spiracles of metasomal terga 2 and 3 positioned lateroventrally, below the lateral edges of the dorsal faces of the terga. The fore wing venation of the Ohio specimen is shown in Fig. 1.

***Neurocrassus* Šnoflák, 1945**

A single male specimen was recovered from the same malaise trap as the above genus, 5 September 1987, at the same site. It appears to be a rare genus even in Europe.



Figs. 1-5. 1-3: Fore wings of 1, *Dolopsidea* sp., ♀, Hocking Co., Ohio; 2, *Neurocrassus* sp., ♂, same locality; 3, *Rhyssalus* sp., ♀, Old Chelsea, Quebec. 4-5: Propodea of 4, *Dolopsidea* sp. (same specimen as above); 5, *Neurocrassus* sp. (also same as above). Scale line = 0.5 mm (1-3); 0.2 mm (4-5).

The obvious distinguishing feature of the genus is its peculiar, partially swollen wing venation (Fig. 2 and see also Šnoflák 1945 and Tobias 1986). Otherwise the genus fits within the *Rhyssipolini sensu* Belokobyl'skii (1984), near *Cantharoctonus* Viereck, *Noserus* Foerster and *Pseudavga* Tobias, although it possesses a mosaic of characters from these genera (c.f. Whitfield & van Achterberg 1987). It will run in the key of Marsh et al. (1987) with some difficulty, due to equivocal hind wing characters, to couplet 180, containing *Cantharoctonus* and *Rhyssipolis* Foerster. It agrees best with *Cantharoctonus* but has a less broad transverse groove at the base of the propodeum, as well as the conspicuous wing features. The propodeal carination is shown in Fig. 5.

Rhyssalus Haliday, 1833

From earlier collections I discovered a female from Old Chelsea, Quebec, collected on 18 July 1987. I have seen several other specimens in the Canadian National Collection, all from eastern Canada (Ontario and Quebec), and probably conspecific.

This genus will run to the same point in the key of Marsh et al. (1987) as *Dolopsidea* (see above). I have given characters that will separate these two genera from each other and the other genera in the key. The fore wing venation is shown in Fig. 3. *Rhyssalus* also shares many characters with *Pseudobathystomus* Belokobyl'skii (1987), which so far has not been discovered in the Nearctic fauna. *Rhyssalus* is distinctive in having metasomal terga 2 and 3 mostly weakly sclerotized and not enlarged relative to the succeeding terga; some species also possess clavate hind tibiae. This group of genera, the *Rhyssalini s.s.*, is much in need of revision at the generic and specific levels.

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LITERATURE CITED

- Belokobyl'ski, S. A. 1984. [Division of the tribe Exothecini s.l. (Hymenoptera: Braconidae) into two with description of a new genus and subgenus.] Zool. Zhurn. 63: 1019–1026. [In Russian.]
- . 1987. A new braconid genus of the supertribe Exothecidii (Hymenoptera: Braconidae). Entomol. Rev. 66: 116–120. [Orig. Russian version 1986.]
- Marsh, P. M., S. R. Shaw, and R. A. Wharton. 1987. An identification manual for the North American genera of the family Braconidae (Hymenoptera). Mem. Entomol. Soc. Wash. 13. 98 pp.
- Šnoflák, J. 1945. *Neurocrassus* gen. n. *tesari* sp. n. Folia Entomol. 8: 25–27.
- Stelfox, A. W. 1951. On the identity of *Rhyssalus indagator* Haliday with *Dolops hastifer* and *D. aculeator* Marshall (Hym., Braconidae). Entomol. Month. Mag. 87: 90–93.
- Tobias, V. I. 1986. [Identification keys to the insects of the European portion of the USSR. Vol. III, 27: Hymenoptera. Parts 4, 5. Braconidae.] Akademia Nauk USSR. Nauka Press. [In Russian.]
- Whitfield, J. B. and C. van Achterberg. 1987. Clarification of the taxonomic status of the genera *Cantharoctonus* Viereck, *Noserus* Foerster and *Pseudavga* Tobias (Hymenoptera: Braconidae). Syst. Entomol. 12: 509–518.